

Abstract of the Disclosure

[0053] An electrode system is provided that generates a current flow that envelops and permeates an entire wound site. The electrode system includes two
5 electrodes that are shaped and oriented to cause the current to flow from one electrode through the wound to the other electrode. A first electrode is applied to the wound site and the second electrode encircles the first electrode and is applied to the skin surrounding
10 the wound cite. The two electrodes may be mounted to an oxygen-permeable layer that provides support for the electrodes and allows the wound site to breathe. An electrically insulative element may be disposed between the two electrodes. A power supply, which may be local
15 to or remote from the electrode system, is provided for applying a voltage potential across the electrodes. In another suitable embodiment, the two electrodes are comprised of oppositely charged polymers.